

7

Date: Wednesday, 1/30/2008 7:54:22 AM  
User: Kim Johnston

# Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : EXTRUSION 'I' BEAM TUBE 4"
Job Number : 37065	
Estimate Number : 10524	
P.O. Number :	Part Number : D25001100
This Issue : 1/30/2008 S.O. No. :	Drawing Number : D2500 REV G
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : PURCHASED PARTS	Drawing Revision : G
Previous Run : 24593	Material :
Written By :	Due Date : 2/15/2008 Qty: 100 Um: Each
Checked & Approved By : <u>[Signature]</u> 08/01/30	
Comment : Est: A 05.11.14 New Issue KJ/JLM	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: 5580

08/01/31

- a) Extrude as per Dwg D2500
- b) Material: 6061-T6 (QQ-A-200/8)
- c) Minimum yield tensile strength = 35 ksi
- d) Minimum ultimate tensile strength = 38 ksi
- e) Minimum elongation = 8%
- f) Order at 100" long
- g) Bon L Canada Inc. tool # 897105
- h) To be packed per DSK 066
- i) Pull test to ASTM standard B221 required.
- j) Material certification is required

100.

★ SEE NCR

2.0	D25001100P	Skidtube Extrusion
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 100.0000 Each(s)  
EXTRUSION 'I' BEAM TUBE 4"

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1  
Receive & Inspect For Transit Damage  
Ensure material certification is attached

08/3/08 (103)

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK  
Inspect dimensions per Dwg D2500  
Check Pull test per Dwg D2500 for compliance page attached.  
Check hardness with Webster tester

[Signature]

(103)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2500-1-100 PAR #: N/A Fault Category: Supplier Bon-L NCR: Yes No DQA: 1 Date: 08/04/14  
 QA: N/C Closed: 1 Date: 08/04/14

NCR: 37065		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08.04.01	3	MAT'L CERT ONLY REFERENCES ASTM B221	<u>CP</u> 08.04.01 per 081042	ENG REVIEWED ASTM & QQ SPEC AND ASTM B221-06 IS ACCEPTABLE. MAT'L OK	N/A	<u>1</u> 08.04.02	<u>CP</u> 08.04.01 per 081042	<u>1</u> 08.04.02

NOTE: Date & initial all entries

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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: EXTRUSION "I" BEAM TUBE 4"

Job Number: 37065

Part Number: D25001100

Job Number:



Seq. #:

Machine Or Operation:

Description:

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: Back Haul

40 - ~~EL~~ SKID TUBE EL 8-4-2

63 -

BB 08/04/03.

6.0

QC21

FINAL INSPECTION/W/O RELEASE



08/04/08

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



u 08-08-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2500	REV. G SHEET 1 OF 3
DATE 07.04.17		TITLE EXTRUSION	SCALE NTS
A	96.03.19	NEW ISSUE	
B	96.03.24	CHANGE INTERNAL WEB	
C	96.04.26	ADD D2500-3 WEB	
D	96.10.07	ADD MATERIAL PROPERTIES	
E	96.10.24	CHANGE MATERIAL TEMPER	
F	97.09.29	CHANGE MAT. TO 6061-T6	
G	07.04.17	ADD NOTES 3,5,6	

**RELEASED**  
07.06.28 *[Signature]*

1. MATERIAL: 6061-T6 (QQ-A-200/8)

MINIMUM TENSILE YIELD STRENGTH = 35 KSI  
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI  
MINIMUM ELONGATION = 8%

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO  
ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY  
TO ENSURE THAT THE BATCH MEETS THE ABOVE  
MINIMUM MECHANICAL PROPERTIES

2. BREAK ALL SHARP CORNERS 0.010 MAX
3. ALL DIMENSIONS ARE IN INCHES
4. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
5. FOR D2500-1 PART NUMBER IS D2500-1-XXX WHERE XXX IS  
CUT LENGTH (EX. D2500-1-190 IS 190" LONG)  
D2500-1 EXTRUSION MANUFACTURED FROM:  
A) BON L DIE # 897015 -> PREFERRED  
B) CARADON MIDEAST DIE # PAH-28030  
C) CARADON MTL DIE # MH-18868
6. FOR D2500-3, PART NUMBER IS D2500-3-XXX WHERE XXX IS  
CUT LENGTH IN INCHES (EX. D2500-3-100 IS 100" LONG)  
D2500-3 EXTRUSION MANUFACTURED FROM:  
A) CARADON INDALEX DIE # MS-18867

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WITHOUT NOTICE  
WORK ORDER  
NO. 37065

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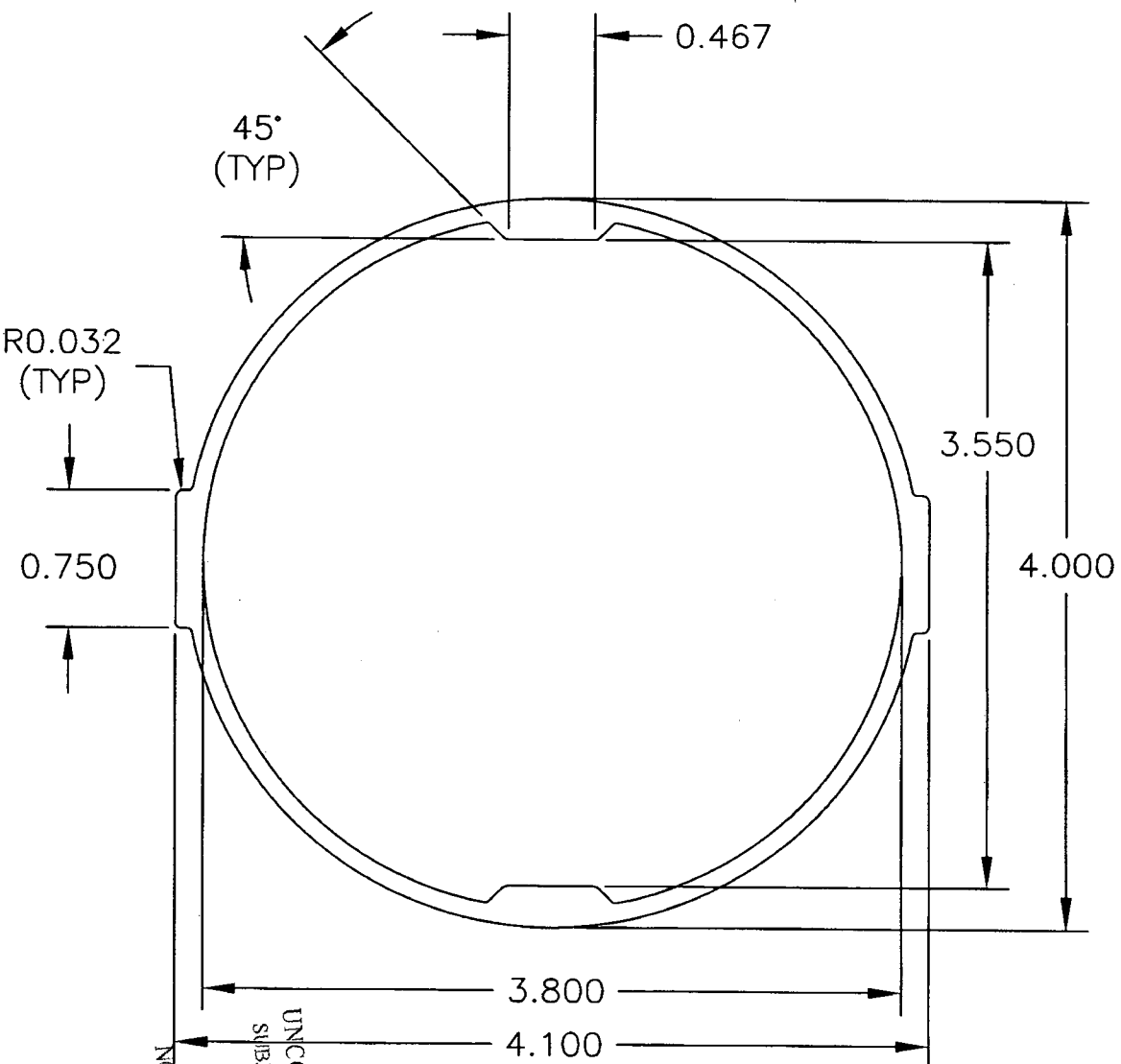
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**DART**

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CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	DRAWING NO. D2500
DATE	07.04.17	TITLE	EXTRUSION	REV. 6 SHEET 2 OF 3
		SCALE	1:1	

**RELEASED**  
07.06.28 *[Signature]*



**D2500-1**

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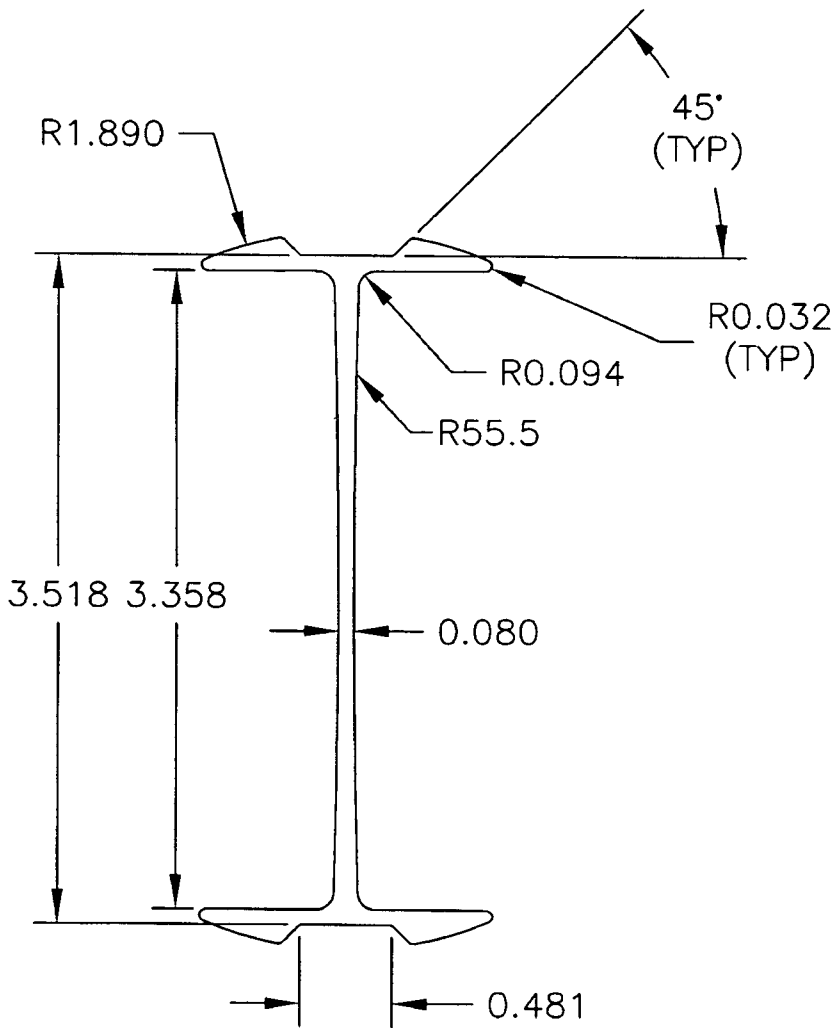
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CHECKED	APPROVED	DRAWING NO.	REV. G
		D2500	SHEET 3 OF 3
DATE		TITLE	SCALE
07.04.17		EXTRUSION	1:1

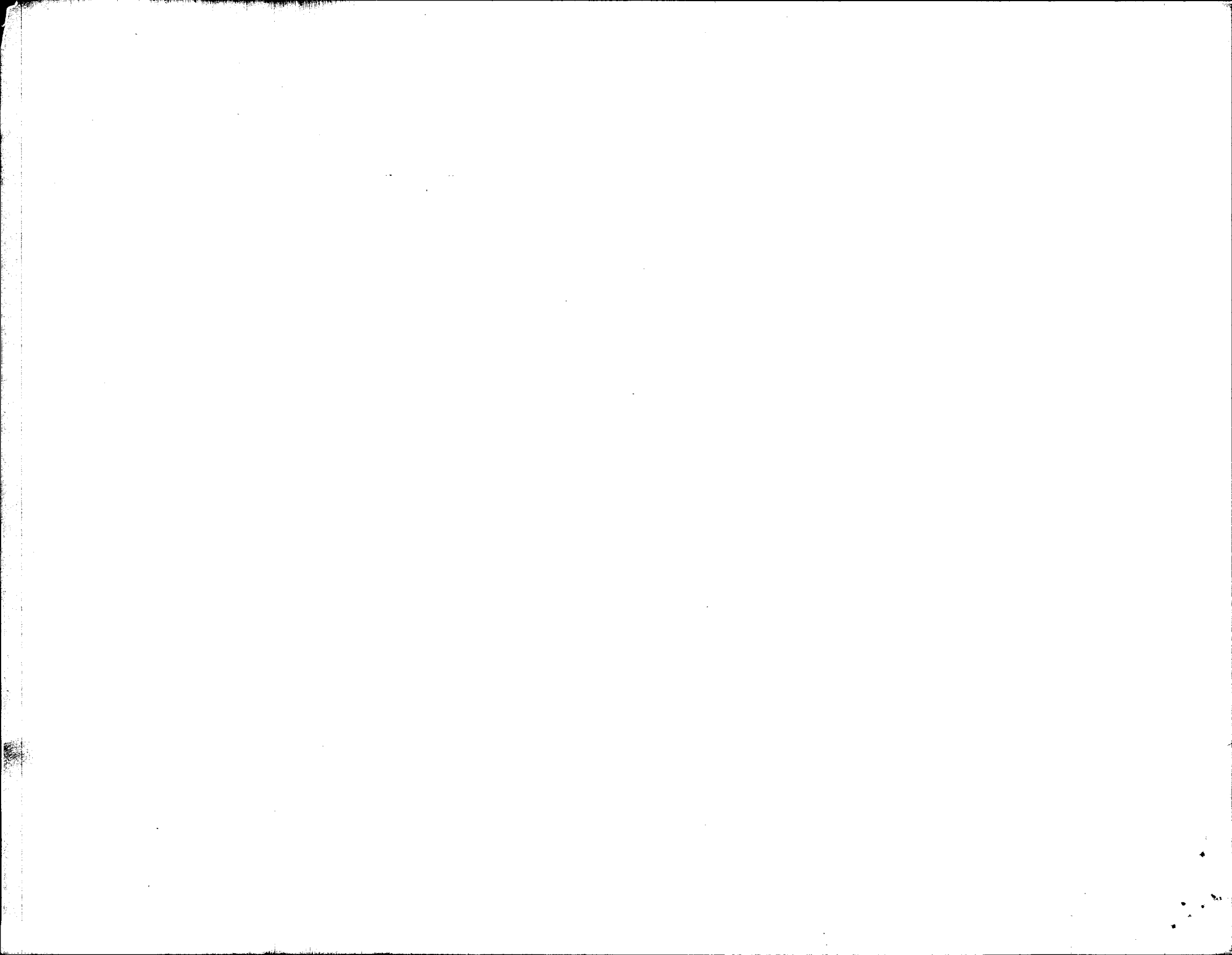
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D2500-3

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NO. 39065





INVOICING COMPANY AND LOCATION  
SIGNATURE ALUMINUM CANADA  
1850 CLEMENTS ROAD  
PICKERING ON L1W 3R8

# SHIPPING MANIFEST

ACCT# 00046024

MANIFEST DATE 03-03-08
MANIFEST NUMBER 636360
SALES ORDER NUMBER 22912

REFER TO  
THESE NUMBERS ON  
ALL CORRESPONDENCE

TERMS / FREIGHT  
O / P

SHIP TO DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY ON K6A 1K7 CN PHONE 613-632-5200	SOLD TO / PURCHASER DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY ON K6A 1K7 CN PHONE 613-632-5200
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CREDIT REP HAMBROOK, PAU 905-508-3250	SALES REP
FIELD SALES REP Kutter A 450-435-6551	CUST SERVICE REP Burton D 905-427-2227

CUSTOMER ID 46024	ORDER DATE 01/31/08	CUSTOMER PO NUMBER 5580	JOB	BILL OF LADING NUMBER 00374632
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ITEM NO.	ORIGINAL ORDER QUANTITY	UNIT	PREVIOUS SHIPPED QUANTITY	MFG. PART NUMBER	ALLOY & TEMPER	FINISH DESCRIPTION	THIS SHIPMENT			UNIT	QUANTITY DUE	
				CUSTOMER PART NUMBER	LENGTH	FABRICATION DESCRIPTION	NBR OF PKGS	GROSS POUNDS	NET QUANTITY			
					CUTTING TOLERANCE	SHIPPING TOLERANCE						
01	100	KG	0	DAA-897105-3	6061 /T6	MILL	5	711	686	KG	0	
		M	0	D2500-1-100	100"	CERTIFICATE OF COMP			261.62	M	0	
		PC	0		+3/16 "	(+015-015,0115-0085)			103	PC	0	
					-0 "							
					LOT/TKT DETAIL:		22912010 / 263919	1	159	154		23 PC
							22912010 / 263920	1	138	133		20 PC
							22912010 / 263921	1	138	133		20 PC
							22912010 / 263922	1	138	133		20 PC
							22912010 / 263923	1	138	133		20 PC

103

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping manifests and signed and dated below by customers authorized representatives.  
No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping manifest were produced in accordance with the fair labor standards act of 1938 as amended. Order accepted subject to the terms and conditions stated on the reverse side.

PAGE 1

5	711	686	KG
		261.62	M
		103	PC
TOTALS			

103

# CERTIFICATE OF COMPLIANCE

**SIGNATURE ALUMINUM CANADA**

1850 CLEMENTS ROAD  
PICKERING, ON L1W 3R8

*(B&L)*

Cert Date	Cert No	Sales Order	Page
03/03/08	174220	22912	1
Cust PO	B/L No	Lot	Date
5580	00374632	22912010	3/03/08

Sold To	Ship To
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7	46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Item No	Part No	Item Description	Cust Part
1.000	DAA-897105-3	100" MILL 6061 T6	D2500-1-100

Gross Weight	711 KGS
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Net Qty	686 KG	103 PC	262 M	5 PKG
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Specification	Die Desc
ASTM B221-06	

**Mechanical Tests:**

Test No.	Tensile MPA / KSI	Yield MPA / KSI	%Elongation	Conductivity	Bend/ Drift HREW
1	301.2 / 43.7	274.7 / 39.9	8.0	.0	95

**Chemical Analysis:**

SI	FE	CU	MN	MG	CR	ZN	TI
.65	.21	.26	.05	.88	.06	.10	.01

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgment form. No other warranties are applicable.

Conchita Ko, QA Manager Signature Aluminum Canada Inc

